tion. It is intended that the following claims define the scope of the invention and that methods and structures within the scope of these claims and their equivalents be covered thereby.

What is claimed is:

1. A unitary implant adapted for placement between adjacent surfaces of a joint comprising:

an inflexible interbody device having no moving components;

a first generally spherical articular bearing surface centered about a central axis and generally conforming to a geometry of a first adjacent joint surface; and a second generally spherical bearing surface centered about a central axis and generally conforming to a geometry of a second adjacent joint surface;

an outer radial edge surface;

a first protrusion extending from the first bearing surface about the central axis of the interbody device, wherein the first protrusion is configured to contact and puncture a central portion of the first adjacent joint surface endplate when the implant is positioned between vertebrae, and

wherein the first protrusion and generally spherical articular bearing surface is adapted to allow rotation and restore near-normal motion between the interbody device and the first adjacent surface.

2. The unitary implant of claim **1**, further comprising:

a second protrusion extending from the second bearing surface about the central axis of the interbody device, and

the second bearing surface is a second articular bearing surface,

wherein the second protrusion is configured to contact and puncture a central portion of the second adjacent surface endplate when the implant is positioned between vertebrae, and

wherein the second protrusion and second articular bearing surface is adapted to allow rotation and restore near-normal motion between the interbody device and the second adjacent surface.

3. The implant of claim **2**, wherein the second protrusion is conical.

4. The implant of claim **2**, wherein the first protrusion or second protrusion comprises:

a spike,

a curved cone,

a truncated cone, or

a cylinder.

5. The implant of claim **2**, wherein the curvature of the first bearing surface and the second bearing surface are centered about a central axis and generally flat near the central axis and transition to spherical curvature about the outer radial edge surface.

6. The implant of claim **1**, wherein the first protrusion is conical.

7. The implant of claim **1**, further comprising:

at least a second and third protrusion, on the second bearing surface adapted to prevent movement between the second bearing surface and the second adjacent surface,

a textured surface finish configured to promote fixation of the second bearing surface to the second adjacent surface;

wherein the at least second and third protrusions are configured to puncture the adjacent endplate when the implant is positioned between vertebrae to resist rotation or migration of the interbody device while still allowing for rotation between the between the interbody device and the first adjacent surface.

8. The implant of claim **7**, further comprising a non-articulating surface texture finish on the second bearing surface, wherein the surface texture comprises;

a grit blasted texture,

a porous texture,

a laser sintered texture,

an etched surface,

a roughened porous spray titanium,

a hydroxyapatite coating,

a porous coating, or

a porous formation, and

configured to promote fibrous tissue on-growth, fibrous tissue ingrowth, bone on-growth or bone ingrowth.

9. The implant of claim **1**, further comprising a generally circular shape about a central axis.

10. The implant of claim **1**, further comprising a non-circular shape about a central axis.

11. The implant of claim **10**, further comprising a keel shaped protrusion extending from the second bearing surface configured to penetrate the endplate of the second adjacent surface to prevent rotation or migration between the second adjacent surface and the interbody device;

wherein the first highly polished articular surface and first protrusion promote rotation between the between the interbody device and the first adjacent surface.

12. The implant of claim **11**, further comprising the second bearing surface textured finish configured with a non-articulating surface texture comprising:

a grit blasted texture;

a porous textures;

a laser sintered textures;

an etched surface;

a roughened porous spray titanium;

a hydroxyapatite coating;

a porous coating; or

a porous formation; and

configured to promote fibrous tissue on-growth, fibrous tissue ingrowth, bone on-growth or bone ingrowth.

13. The implant of claim **1**, further comprising an elliptical planar shape about a central axis.

14. The interbody device of claim **1**, further comprising:

a Reuleaux polygon planar shape comprising three or more odd number of sides; or

an irregular Reuleaux planar shape comprising three or more odd number of sides with one or more sides having straight side edges, curved side edges or combinations of straight and curved side edges.

15. The implant of claim **1**, further comprising generally spherical articular curvature of the first bearing surface and the second bearing surface comprising increasing arcuate radii of curvature centered about the central axis from the outer radial edge surface to a zone near the central axis of the interbody device.

16. The implant of claim **1**, wherein the curvature of the first bearing surface and the second bearing surface are different from each other.

17. The implant of claim **1**, wherein the first bearing surface and the second bearing surface are inclined to each other about a central transverse plane and centered about the central axis.

18. The implant of claim **1**, wherein the first bearing surface or second bearing surface comprises:

pyrolytic carbon,

titanium nitride,

tantalum,